

COC #16

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## CHAIN OF CUSTODY REPORT

Work Order #: **MA05012**

CLIENT: <b>Bristol Environmental &amp; Engineering</b>		INVOICE TO:										<b>TURNAROUND REQUEST in Business Days*</b> Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">10</div> <div style="border: 1px solid black; padding: 2px;">7</div> <div style="border: 1px solid black; padding: 2px;">5</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">3</div> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">&lt;1</div> </div> STD. Petroleum Hydrocarbon Analyses <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px;">5</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">3</div> <div style="border: 1px solid black; padding: 2px;">2</div> <div style="border: 1px solid black; padding: 2px;">1</div> <div style="border: 1px solid black; padding: 2px;">&lt;1</div> </div> STD. <span style="border: 1px solid black; padding: 2px;">OTHER</span> Please Specify _____ <small>*Turnaround Requests less than standard may incur Rush Charges.</small>																									
REPORT TO: <b>Anne Kranawetter</b>																P.O. NUMBER: <b>21090</b>																					
ADDRESS: <b>Amchitka Island, Alaska</b>																																					
PHONE: <b>770-0974</b>		FAX: <b>770-0975</b>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="12">REQUESTED ANALYSES</th> </tr> <tr> <td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td><td style="width:3.33%;"></td> </tr> </table>										REQUESTED ANALYSES																							
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PROJECT NAME: <b>Amchitka</b>		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">DRO</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">GTEx/</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Nephel</div> </div>												MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID																				
PROJECT NUMBER: <b>21090</b>																																					
SAMPLED BY: <b>Anne Kranawetter</b>																																					
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME																																				
1. <b>01AMB906 SL-A</b>	<b>5/10/01 - 17:40</b>											<b>S</b>	<b>2</b>	<b>* P10 134</b>																							
2. <b>Trip Blank</b>	<b>5/10/01 - 18:10</b>																																				
3.																																					
4. <b>Can - 8/1/01</b>																																					
5. <b>ID change.</b>																																					
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15.																																					
RELINQUISHED BY: <b>Charles Marshall</b>		DATE: <b>5/18/01</b>		RECEIVED BY: <b>Stephen Wilson</b>		DATE: <b>5/18/01</b>																															
PRINT NAME: <b>Charles Marshall</b>		FIRM: <b>Bristol</b>		TIME: <b>1824</b>		PRINT NAME: <b>Stephen Wilson</b>		FIRM: <b>NCA</b>		TIME: <b>1824</b>																											
RELINQUISHED BY:		DATE:		RECEIVED BY:		DATE:																															
PRINT NAME:		FIRM:		TIME:		PRINT NAME:		FIRM:		TIME:																											
ADDITIONAL REMARKS:													TEMP:	PAGE OF																							



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541.383.9310 fax 541.382.7588

6 December, 2001

Anne Kranawetter  
Bristol Environmental & Engineering  
2000 W International Airport C#1  
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 05/18/01 18:24. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson  
Environmental Group Leader

Work Orders included in this report:

**M105012**



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Bristol Environmental & Engineering  
2000 W International Airport C#1  
Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
10/23/01 14:23

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB906SL-A	M105012-01	Soil	05/18/01 17:40	05/18/01 18:24
Trip Blk 5/18/01	M105012-02	Soil	05/18/01 18:10	05/18/01 18:24

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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**North Creek Analytical, Inc.**  
**Environmental Laboratory Network**

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2000 W International Airport C#1  
Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
10/23/01 14:23

**Diesel Hydrocarbons (C10-C25) per AK102**  
**North Creek Analytical - Mobile Lab**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMB906SL-A (M105012-01) Soil</b>						Sampled: 05/18/01 Received: 05/18/01			
<b>Diesel Range Organics</b>	<b>655</b>	150	mg/kg dry	1	AK 102	05/20/01	05/21/01	0105027	
<i>Surr: 1-Chlorooctadecane</i>	<i>102 %</i>	<i>75-125</i>							

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Anchorage, AK 99502-1116

Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
10/23/01 14:23

## BTEX, MTBE and Naphthalene per EPA Method 8021B

### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMB906SL-A (M105012-01) Soil</b>					Sampled: 05/18/01 Received: 05/18/01			<b>G-01</b>	
Benzene	ND	0.284	mg/kg dry	50	1B BTEX/MTI	05/18/01	05/18/01	0105019	
Toluene	ND	0.284	"	"	"	"	"	"	
Ethylbenzene	ND	0.284	"	"	"	"	"	"	
Xylenes (total)	ND	0.568	"	"	"	"	"	"	
Naphthalene	ND	2.84	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>20.1 %</i>	<i>50-150</i>							<i>S-02</i>
<b>Trip Blk 5/18/01 (M105012-02) Soil</b>					Sampled: 05/18/01 Received: 05/18/01				
Benzene	ND	0.0590	mg/kg dry	50	1B BTEX/MTI	05/18/01	05/18/01	0105019	
Toluene	ND	0.0590	"	"	"	"	"	"	
Ethylbenzene	ND	0.0590	"	"	"	"	"	"	
Xylenes (total)	ND	0.118	"	"	"	"	"	"	
Naphthalene	ND	0.590	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	<i>97.3 %</i>	<i>50-150</i>							

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

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Project: Amchitka  
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**Reported:**  
10/23/01 14:23

**Physical Parameters per APHA/ASTM/EPA Methods**  
**North Creek Analytical - Mobile Lab**

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
<b>01AMB906SL-A (M105012-01) Soil</b>					Sampled: 05/18/01 Received: 05/18/01				
% Solids	85.0	0.0100 % by Weight		1	Gravimetric	05/19/01	05/20/01	0105033	
<b>Trip Blk 5/18/01 (M105012-02) Soil</b>					Sampled: 05/18/01 Received: 05/18/01				
% Solids	100	0.0100 % by Weight		1	Gravimetric	05/19/01	05/20/01	0105033	

North Creek Analytical - Mobile Lab

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Project: Amchitka  
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**Reported:**  
10/23/01 14:23

### Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

#### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 0105027 - 3545 ASE</b>										
<b>Blank (0105027-BLK1)</b>				Prepared & Analyzed: 05/20/01						
Diesel Range Organics	ND	150	mg/kg wet							
<i>Surr: 1-Chlorooctadecane</i>	<i>11.9</i>		<i>"</i>	<i>12.5</i>		<i>95.2</i>	<i>75-125</i>			
<b>LCS (0105027-BS1)</b>				Prepared & Analyzed: 05/20/01						
Diesel Range Organics	1260	150	mg/kg wet	1250		101	75-125			
<i>Surr: 1-Chlorooctadecane</i>	<i>15.3</i>		<i>"</i>	<i>12.5</i>		<i>122</i>	<i>75-125</i>			
<b>LCS Dup (0105027-BSD1)</b>				Prepared: 05/20/01 Analyzed: 05/21/01						
Diesel Range Organics	1270	150	mg/kg wet	1250		102	75-125	0.791	20	
<i>Surr: 1-Chlorooctadecane</i>	<i>12.1</i>		<i>"</i>	<i>12.5</i>		<i>96.8</i>	<i>75-125</i>			
<b>Duplicate (0105027-DUP3)</b>				Source: M105018-03 Prepared: 05/20/01 Analyzed: 05/21/01						
Diesel Range Organics	625	150	mg/kg dry		621			0.642	50	
<i>Surr: 1-Chlorooctadecane</i>	<i>6.57</i>		<i>"</i>	<i>13.9</i>		<i>47.3</i>	<i>75-125</i>			<i>S-04</i>
<b>Duplicate (0105027-DUP4)</b>				Source: M105018-04 Prepared: 05/20/01 Analyzed: 05/21/01						
Diesel Range Organics	1200	186	mg/kg dry		1250			4.08	50	
<i>Surr: 1-Chlorooctadecane</i>	<i>7.70</i>		<i>"</i>	<i>15.5</i>		<i>49.7</i>	<i>75-125</i>			<i>S-04</i>
<b>Matrix Spike (0105027-MS1)</b>				Source: M105012-01 Prepared: 05/20/01 Analyzed: 05/21/01						
Diesel Range Organics	2270	150	mg/kg dry	1440	655	112	60-140			
<i>Surr: 1-Chlorooctadecane</i>	<i>15.0</i>		<i>"</i>	<i>14.4</i>		<i>104</i>	<i>75-125</i>			

North Creek Analytical - Mobile Lab

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Project: Amchitka  
Project Number: 21090  
Project Manager: Anne Kranawetter

**Reported:**  
10/23/01 14:23

### BTEX, MTBE and Naphthalene per EPA Method 8021B - Quality Control

#### North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 0105019 - MeOH Extraction

##### Blank (0105019-BLK1)

Prepared & Analyzed: 05/18/01

Benzene	ND	0.100	mg/kg wet
Toluene	ND	0.100	"
Ethylbenzene	ND	0.100	"
Xylenes (total)	ND	0.200	"
Naphthalene	ND	1.00	"

*Surr: 4-BFB* 2.42 " 2.50 96.8 50-150

##### LCS (0105019-BS1)

Prepared & Analyzed: 05/18/01

Benzene	2.34	0.100	mg/kg wet	2.50	93.6	69-138
Toluene	2.30	0.100	"	2.50	92.0	53-151
Ethylbenzene	2.44	0.100	"	2.50	97.6	61-141
Xylenes (total)	6.87	0.200	"	7.50	91.6	62-141
Naphthalene	2.88	1.00	"	2.50	115	75-126

*Surr: 4-BFB* 2.58 " 2.50 103 50-150

North Creek Analytical - Mobile Lab

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**Reported:**  
10/23/01 14:23

### Notes and Definitions

G-01 This sample appears to contain extractable diesel range organics.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.

S-04 The surrogate recovery for this sample is outside of method established control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

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**Environmental Laboratory Network**

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### Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M105012 FINAL 10 23 01 1423.mdb Default Report (not modified)
0105027-DUP3	AK102 (DRO)	1-Chlorooctadecane	S-04
0105027-DUP3	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit
0105027-DUP4	AK102 (DRO)	1-Chlorooctadecane	S-04
0105027-DUP4	AK102 (DRO)	1-Chlorooctadecane	Exceeds lower control limit
M105012-01	8021B BTEX/MTBE/N	4-BFB	S-02
M105012-01	8021B BTEX/MTBE/N		G-01
M105012-01	8021B BTEX/MTBE/N	4-BFB	Exceeds lower control limit